

Energy Education Center Irwindale's Smart Energy Experience[®]



SCE's interactive smart technology display brings California's residential construction standards up close.

About the Smart Energy Experience[®]

Located at SCE's Energy Education Center in Irwindale, the Smart Energy Experience[®] is a full-scale, operational demonstration home. Visitors can walk through displays and gain a better understanding of how the building itself, along with smart technology can be used to manage energy use, lower costs, decrease their carbon footprint, and reduce grid demand.

The interactive environment provides a look at the home of tomorrow, including how smart grid technologies function as part of an automated, intelligent power delivery system to help create a smarter, cleaner, more reliable energy future.

Visitors take guided or self-guided tours of the Smart Energy Experience[®], and walk through a full, simulated day in a home demonstrating the latest in energy-saving opportunities.

Location:

Energy Education Center – Irwindale
6090 N. Irwindale Ave.
Irwindale, CA 91702
energyeducationcenter@sce.com

Smart Energy Experience[®] Guided Tour Reservations:

smarttours@sce.com
(no reservations needed for self-guided tours)

Registration for Classes, Seminars and Workshops

on.sce.com/workshops

Home Energy Technologies

Technologies on display include:

- Smart communicating devices
- Home energy management systems
- Small-scale renewable generation (such as solar power)
- Residential Level 2 Electric Vehicle Supply Equipment
- Best practices for sustainable and energy-efficient home design and construction

Energy-efficient equipment on display includes:

- Active battery storage
- Heat pump water heater
- Heat pump Heating, Ventilation, and Air Conditioning (HVAC) system
- Heat pump clothes dryer
- Induction cooktop

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Residential High-Performance Envelope

To support California's goal of achieving Zero Net Energy (ZNE) for all new-construction homes, and to show our visitors what's involved in building homes to reach this goal, we developed an interactive 3-D, life-size Residential High-Performance Envelope Display to provide a view of the actual materials needed to construct high-performance walls and attics in compliance with current and future energy codes.

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1. Cool roof rated asphalt shingles, advanced framing, raised heel truss, and insulated header
2. Wall and roof Structural Insulated Panels (SIPs), rain screen, stone veneer
3. Rafters and beam, duct in conditioned space, framing air seal, vinyl window, radiant barrier
4. Insulated roof tile, PV panel, spray foam/sealed attic, drywall clips, insulating stucco
5. Metal Spanish tile, composite window, window flashing details, exterior rigid insulation
6. Plumbing and wiring penetration air seal, switch box air seal, mineral wool insulation
7. Insulated clay roof tile, cementitious spray foam, fiberglass frame window, foam stone veneer
8. Wedge above roof insulation, laminated radiant barrier, wainscoting, window buck

Building contractors, developers, designers, architects, and students can use these innovative, hands-on modules to get an understanding of what goes into creating a ZNE building.



The Smart Energy Experience[®] + Energy Education Center Classes

Are you an architect, contractor, designer or developer looking for energy solutions for your residential, commercial or institutional project? We're here to help. SCE's Energy Education Center courses cover a wide array of energy-related topics relevant to the work that professionals face each day.

We pair our classes with the Smart Energy Experience's[®] displays, which showcase energy-efficient equipment and hands-on construction techniques to produce a dynamic and immersive educational opportunity. Learn about cutting-edge technology in the classroom and see it in real-time in the Smart Energy Experience[®]!

Just a few of our courses include:

- Building Design & Construction
- Building Performance
- Commercial & Industrial Technologies
- Energy Codes & Standards
- Home Performance
- Heating, Ventilating, Air Conditioning and Refrigeration (HVAC/R) Systems & Technologies
- Renewable Energy & Sustainability